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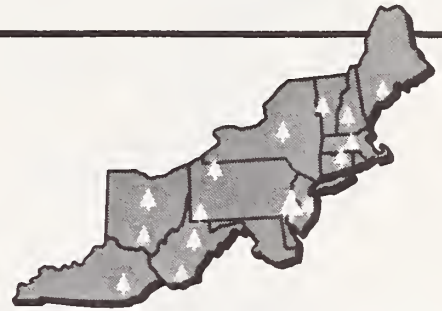
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# Northeastern Forest Experiment Station



FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE, 370 REED ROAD, BROOMALL, PA. 19008

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## HIKER PREFERENCES FOR TRAIL FEATURES AND MAPS

**—ROGER E. McCAY**Research Forester  
Northeastern Forest Experiment Station,  
Parsons, West Virginia

*Abstract.* Hikers at a Pennsylvania state park were asked what items were essential to their trail experience. From a list of 18 items, an overwhelming majority of hikers wanted to see trail names and directional signs along a natural surfaced trail.

## INTRODUCTION

Walking was once the only way to get from one place to another. Times have changed. We now have faster ways of traveling, but people still walk. They walk, or hike, on city sidewalks, along suburban streets, and in wooded areas. The number of hikers has increased to the point where city planners, park supervisors, and resource managers have become concerned about their needs.

Within limited budgets, trails and trail maps are being developed every day. Trail builders and managers want to design each trail so that it gives hikers the most from their trail experience, but they often lack information about what the users want. The purpose here is to provide a better understanding of what hikers feel is essential to their

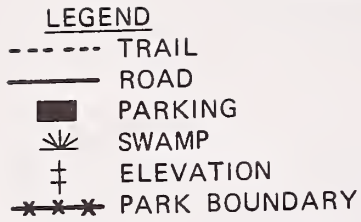
trail experience. This will help to bridge the gap between what users want and what trail managers provide.

## STUDY AREA

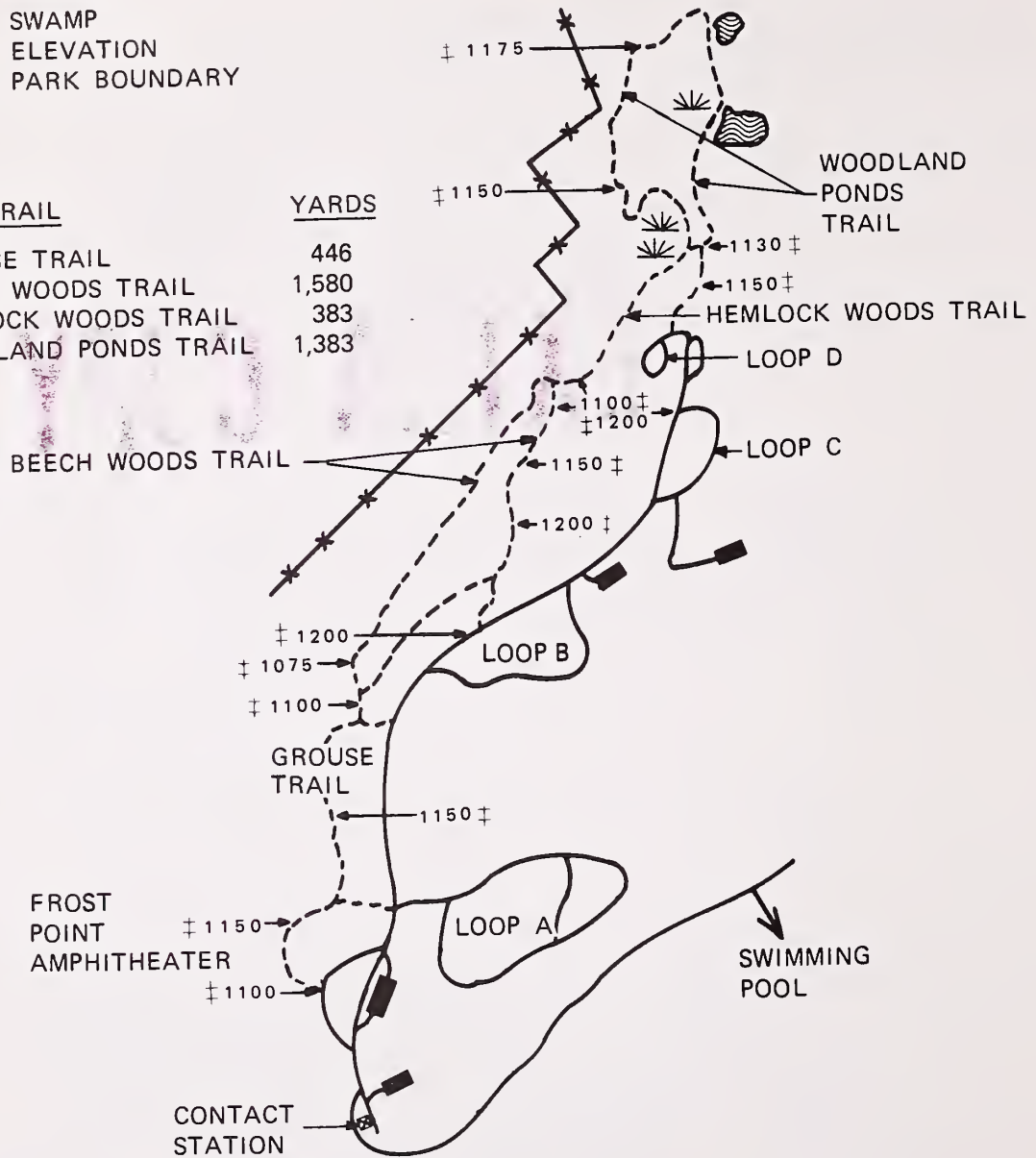
The study was conducted at Lackawanna State Park, Dalton, Pa., which opened in 1972. The trail system was designed and built during the spring and summer of 1976. The estimated number of people who used the trail during the summer of 1977 was 800.

Eighty-five percent of the park visitors live in the Scranton urban area. Almost all of the trail users camp at the park. A few special groups—Girl Scouts, birdwatching clubs—join the park naturalist for nature walks.

Figure 1.—Lackawanna State Park Trail System.



| TRAIL                | YARDS |
|----------------------|-------|
| GROUSE TRAIL         | 446   |
| BEECH WOODS TRAIL    | 1,580 |
| HEMLOCK WOODS TRAIL  | 383   |
| WOODLAND PONDS TRAIL | 1,383 |



**Table 1.—Percentage of hikers' responses to "This item was absolutely essential to the trail experience" for 18 items**

| Item                          | Strongly agree | Tend to agree | Hard to decide | Tend to disagree | Strongly disagree |
|-------------------------------|----------------|---------------|----------------|------------------|-------------------|
| A trail map                   | 64             | 19            | 4              | 9                | 4                 |
| Items on map                  |                |               |                |                  |                   |
| Trail distances               | 51             | 33            | 12             | 2                | 2                 |
| North arrow                   | 41             | 41            | 10             | 5                | 3                 |
| Elevations at selected points | 37             | 40            | 12             | 7                | 4                 |
| Contour lines                 | 39             | 25            | 20             | 12               | 4                 |
| Property boundaries           | 45             | 39            | 9              | 5                | 2                 |
| Trail names                   | 66             | 27            | 2              | 3                | 2                 |
| Major features                | 76             | 16            | 4              | 4                | —                 |
| Rest stops                    | 52             | 25            | 7              | 14               | 2                 |
| Items on trail                |                |               |                |                  |                   |
| Trail name signs              | 75             | 19            | —              | 1                | 5                 |
| Direction signs               | 80             | 13            | 3              | 2                | 2                 |
| Rest stops                    | 54             | 23            | 5              | 16               | 2                 |
| Wildlife feeding stations     | 53             | 29            | 8              | 10               | —                 |
| Natural surface               | 77             | 13            | 5              | 3                | 2                 |
| Manmade surface               | 24             | 21            | 12             | 22               | 21                |
| Litter containers             | 51             | 26            | 11             | 9                | 3                 |
| One-way trails                | 41             | 20            | 12             | 20               | 7                 |
| Guide books                   | 59             | 26            | 11             | 2                | 2                 |

## PROCEDURE

The study was conducted in two phases. During the first phase, in the summer of 1976, we solicited general information about what trail features are important to users and what should be included on trail maps. About 65 hikers responded to a map-and-questionnaire form that had been placed in a box on each trail. This information was used to develop the map (Fig. 1) and the response form (Table 1) for the second phase of the study.

Data for the second phase were collected in two ways. A box with an instruction sign was placed on each trail head. Hikers took a map from a box, walked the trail, filled out the response form on back of the map, and returned it to a box. Also, the park naturalist asked each individual who attended his Saturday and Sunday afternoon nature walks to fill out a response form. A total of 166 usable responses were returned.

The form asked the trail user to respond to the statement "This item was absolutely essential to

the trail experience" for each of 18 items. One of five responses, which ranged from "strongly agree" to "strongly disagree," could be checked.

## RESULTS

Hikers strongly agreed or tended to agree that all but 1 of the 18 items listed were essential to their trail experience (Table 1). Hikers were about equally divided between those who agreed a man-made surface was essential (45 percent) and those who did not (43 percent), with 12 percent undecided.

An overwhelming majority of the hikers wanted trail names on the trails (94 percent). The majority also indicated that directional signs (93 percent), natural surface (90 percent), guide books (85 percent), and wildlife feeding stations (82 percent) were essential to their trail experience.

The item hikers most wanted to see on trail maps were trail names (93 percent), major features

(92 percent), distances (84 percent), property boundaries (84 percent), and a north directional arrow (82 percent).

Data in this study indicate that hikers at Lackawanna State Park agree that many items are essen-

tial to their trail experience. They especially want to know where a trail leads, length of the trail, and what can be found along the trail. Within the limits of his trail budget, the trail manager can use this information to provide those items the hikers want.

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